Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

No. II.

TRANSFERS FROM COPPERPLATE TO ZINC OR STONE.

The SILVER ISIS MEDAL *and* FIVE POUNDS *were voted to Mr. R.* REDMAN, *43 Great Wild Street, Lincoln's Inn Fields, for his Method of making Transfers from Copperplate Printing to Zinc or Stone.*

THE object aimed at by Mr. Redman is to make a transfer of copperplate engraving to zinc, retaining, at the same time, the whole, or nearly the whole, of its original sharpness and distinctness. The same process may be applied to making a retransfer from stone to stone or zinc, and thus obtaining two or more plates of the same subject; which has been found to be a great advantage when a great number of impressions are required, or a smaller number in a shorter time than can be taken off from a single plate or stone.

The first part of the process consists in taking an impression from the copperplate in the usual way, but with a peculiar ink, on transfer paper peculiarly prepared.

The composition of this ink, which he calls chemical ink, is as follows:—

3 oz. of shell lac;
1 — mastich;
1½ — yellow bees' wax;
½ — tallow;
4 — hard curd soap, and lamp-black enough to colour it.

The above ingredients are to be mixed together most intimately, and are then to be burnt in a pipkin for ten minutes, stirring the mass carefully all the time. The residue by exposure to the air becomes damp; so that by pounding it in a mortar it concretes into a paste of a very stiff consistence, and in this state is called, by Mr. Redman, *hard ink.*

One part of this hard ink, rubbed and ground with two parts of common stiff lithographic ink, forms the transfer ink; which being applied to the surface of an engraved copperplate in the usual way, gives an accurate impression to prepared transfer paper.

This latter is prepared as follows: —

One quarter of a pound of the best flour is to be mixed with common porter, in such proportion that it shall form, by boiling, a thin paste of a perfectly uniform consistence; which paste is to be laid quite evenly on the smooth surface of a sheet of India paper, and is to be dried gradually.

The impression being obtained on this prepared paper, it is to be transferred in the usual way to a smooth plate of zinc. When the zinc has received the transferred impression, it is to be covered with an infusion of nut-galls, in the proportion of one ounce of galls to half a pint of water, the mixture to be then simmered for ten minutes in any vessel not of iron. The liquor is to be left on the plate for from five to ten minutes, its effect being to neutralise the alkali of the transfer ink, and thus to harden it and prevent it from spreading when sponged with water previous to printing from it.

Specimens of the ink, and of maps and other subjects transferred by Mr. Redman's process, were laid before the Society. Mr. Webb, lithographer, appeared personally before the Committee, and stated that impressions transferred by the usual process to zincplate come off far sharper and better than from stone. He finds no difficulty in using Mr. Redman's ink for taking transfer impressions from copper. When a zincplate is laid by, after use, he sponges it over with the infusion of nut-galls, which protects it from oxidation by covering it with a brown film. On trying other inks in retransferring to stone, they sometimes fail—Mr. Redman's never does.

---

17 *Gate Street,*
18th March, 1838.

Sir,

I beg to say, that R. Redman has occasionally made retransfers from copper to stone, and from stone to zinc, tolerably successful, and to my satisfaction; and that this mode is very useful with hurried jobs and long numbers.

I am, Sir, &c. &c.
Wm. Day.

Lithographic Office, 3 *Wellington Street, Strand,*
19th March, 1839.

Sir,

The system of retransferring from copperplates to stone, &c. as practised by R. Redman, has been very successfully and beneficially used in my office; and where large numbers are required, it is invaluable, as copies may be produced *ad infinitum* without the least injury to the original engraving.

E. F. Madeley.